CORRES. CONTROL
OUTGOING LTR NO.

DOE ORDER# 4100.1

94 RF 10277

DIST.	LTR	ENC
AMARAL, M.E.		
BURLINGAME, A.H.		
BUSBY, W.S. file	X	
BRANCH, D.B.		
CARNIVAL, G.J.		
DAVIS, J.G.		
FERRERA, D.W.		
FRAY, R.E.		
GEIS, J.A.		
GLOVER, W.S.		
GOLAN, P.M.		
HANNI, B.J.		
HARMAN, L.K.		
HEALY, T.J.		
HEDAHL, T.		
HILBIG, J.G.		
HUTCHINS, N.M.		
JACKSON, D.T.		
KELL, R.E.		
KUESTER, A.W.		
MARX, G.E.		
McDONALD, M.M.		
McKENNA, F.G.		
MONTROSE, J.K.		
MORGAN, R.V.		
POTTER, G.L.		
PIZZUTO, V.M.		
RISING, T.L.		
SANDLIN, N.B.		
SCHWARTZ, J.K.		
SETLOCK, G.H.		
STEWART, D.L.		
STIGER, S.G.		
TOBIN, P.M.		
VOORHEIS, G.M.		
WILSON, J.M.		
Hopkins, J	X	
Bray, J	X	
Volk, R	X	
Laucin, P	X	
Lowe, A.		
CORRES. CONTROL	X	X
ADMN RECORD/080	X	X
TRAFFIC		
PATS/T130G		

CLASSIFICATION:

UCNI		
UNCLASSIFIED		
CONFIDENTIAL		
SECRET		

AUTHORIZED CLASSIFIER SIGNATURE
DOCUMENT CLASSIFICATION REVIEW WAIVER PER CLASSIFICATION OFFICE
DATE 10/25/94

IN REPLY TO RFP CC NO:
NA

ACTION ITEM STATUS
P PARTIAL/OPEN
C CLOSED

ADMIN APPROVALS:
ORIG & TYPIST INITIALS
JRB/pap

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November 3, 1994

94-RF-10277

S. R. Grace
Environmental Restoration Division
DOE, RFFO

IMPLEMENTATION OF ACCELERATED REMOVAL ACTIONS FOR OPERABLE UNIT 2 (OU 2)
WSB-104-94

The OU 2 Characterization Team recently performed an analysis on the implementation of an accelerated response action on the trenches of OU 2. Both non-time critical removal actions and time-critical removal actions were examined by reviewing Environmental Protection Agency (EPA) Guidance Documents, the National Contingency Plan, and accelerated response actions already being implemented at Rocky Flats Environmental Technology Site (RFETS). Two alternatives which EG&G Rocky Flats, Inc. investigated include a Proposed Action Memorandum (PAM) as a time-critical-removal action (actions implemented within six months) and an Engineering Evaluation/Cost Analysis (EE/CA) as a non-time-critical removal action (actions requiring longer than six months prior to implementation).

The proposed accelerated removal action for OU 2 would include further characterization of trench 1 of the Mound Area, trench 2 of the 903 Pad Area, Trenches 3, 4, 10, 11, 13 of the Northeast Trenches Area, and trenches 5, 6, 7, 8, 9, and 12 of the Southeast Trenches Area using electromagnetic surveys and limited intrusive investigations within the perimeter of the trench boundaries. Trenches representing the main sources of contamination could then be targeted for an accelerated response action by developing an EE/CA report. Accelerated response actions could include source removal by excavation with ex-situ treatment or by executing in-situ treatment technologies. Alternatives would be analyzed for effectiveness, implementability, and cost. The chosen alternative would be described in an action memorandum. An accelerated removal action would increase the effectiveness of a final remedial action at OU 2 in the following ways:

- An accelerated removal action will allow contents of the trenches to be identified prior to determination of a final remedial action alternative. This will ensure that the appropriate final remedial action is chosen.

- Removing the source of subsurface soil and groundwater contamination by excavation or in-situ treatment would increase the number of cleanup methodologies available for a final remedial activity. (i.e. the effectiveness of in-situ treatment would increase significantly).

ADMIN RECORD

- Although, there is no immediate threat to public health and the environment posed by contaminants migrating from trenches within OU 2, an accelerated response action would prevent further contaminant migration that could otherwise exacerbate final cleanup efforts at the site.

The OU 2 Characterization Team recommends that a non-time-critical removal action (as proposed in the National Contingency Plan, [40 CFR 300.415(4)]) and detailed in the EE/CA Implementation Methodology, Rocky Flats Environmental Technology Site, September 1994) be considered for Operable Unit 2 for the following reasons:

- Further characterization of the trenches will be required in order to better identify sources of contamination within the proposed trench boundaries. Per National Contingency Plan requirements [40 CFR 300.415(4)(ii)], characterization activities require a Sampling and Analysis Plan to be developed consisting of two sections: a field sampling plan and a quality assurance project plan. This requires an approval from EPA and Colorado Department of Public Health and Environment (CDPHE). At the present time, requirements stipulated under PAM guidance do not recognize development and review periods for a sampling and analysis plan.

- Although results from a comprehensive characterization plan can accurately identify sources contributing to groundwater contamination, the uncertainty of some contents within the trenches should always be considered. Unlike removal actions incorporating basic excavation activities of a known source, this accelerated action will require an engineering evaluation in order to evaluate what removal alternatives will effectively contribute to the final remedial action of OU 2. An engineering evaluation will allow for a thorough analysis of treatment options, waste considerations, and project schedule and cost requirements. Implementing this removal action under a PAM would not allow EG&G enough time to conduct an analysis of alternatives.

- Included in the scope of this non-time-critical removal action will be a comprehensive health and safety plan addressing issues unique to this project. Issues which should be considered include the possibility for presence of depleted uranium and plutonium in Trench 1, corroded drums leaking hazardous materials, and the presence of radionuclides in subsurface soils. The Health and Safety Plan would require a review and approval period similar to the Sampling and Analysis Plan.

The implementation of a non-time-critical removal action can be a vital part in the final remedial action of a site. By properly evaluating the availability of alternatives, the accelerated action will be effective in reducing the overall health risks of OU 2, allow waste issues to be considered, and prevent further contaminant migration from the trench areas. The primary objective of non-time critical removal actions is to contribute to the efficient performance of any long term remedial action. This will not be achieved to the fullest extent possible if alternatives and benefits are not analyzed prior to developing an action memorandum.

The OU 2 Characterization Team is also considering the accelerated removal actions for the radionuclide "hotspots" contaminating the surface and subsurface soils of the 903 Pad and Lip Area. The nature of this removal would involve much simpler technologies (i.e. surficial soil excavation) and could be implemented as a Proposed Action Memorandum (PAM). Also, a very similar project was successfully completed in OU 1 with the use of a PAM. The OU 2 Characterization Team is currently analyzing implementation strategies for this removal action. The Pam approach will be used whenever appropriate.

Both projects will support the Rocky Flats Strategic Plan objective to complete accelerated clean-up actions on at least 40 Individual Hazardous Substance Sites by the end of Fiscal Year 1997. EG&G will proceed with the EE/CA approach for the trench areas unless advised otherwise by the Department of Energy, Rocky Flats Field Office, within the next two weeks. If you have any questions or require additional information, please call Pete Laurin at extension 8702.

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OU 2 Closure
Environmental Restoration Management
EG&G Rocky Flats, Inc.

JRB:pap

Orig. and 1 cc - S. R. Grace

cc:
E. A. Dille - AEI